Hospital Performance in Rhode Island

How Often Our Hospitals Provide Recommended Care for Heart Attack, Heart Failure and Pneumonia

Second Edition

Rhode Island Department of Health July 2003





July, 2003

Dear Rhode Islander,

This is a report on how often hospitals in Rhode Island are providing recommended care to their patients. This is the second time that the Department of Health has produced such a report. The report is one of many reports that have already been put out or will be put out soon by the Department of Health on different aspects of quality of care provided by licensed health care facilities in our State. For example, the Department of Health has issued reports on patient satisfaction with hospital care and the quality of nursing home care. This report was prepared by Qualidigm[®] and Quality Partners of Rhode Island and was made possible, in part, with support from the Centers for Medicare & Medicaid Services.

In 1998, under the leadership of Charles Fogarty, the current Lieutenant Governor, the Rhode Island General Assembly passed a law creating the Rhode Island Quality Performance Measurement and Reporting Program. The goal of this law is to improve the quality of health care in our State. The task of the Quality Performance Measurement and Reporting Program is to report to the public about the quality of care provided by licensed health care facilities in Rhode Island (e.g., hospitals, nursing homes, and home health care agencies). This program is run by the Rhode Island Department of Health.

Since 1998, we have worked to establish a process to improve health care in our State. We have gained national attention because of the many groups that are participating in these efforts. Representatives from the Rhode Island Department of Health, the Hospital Association of Rhode Island, individual hospitals, physician groups, nurses, insurers, consumer groups and other interested parties have worked together to develop the program.

With the cooperation of numerous health care agencies and organizations, as well as hospitals in Rhode Island, we have put together this report. We hope it will be informative and useful to you, the consumer. This information also will be used to help hospitals continue to improve care.

The health care system is an important part of our State's future. We are working constantly to help improve this system and ensure the best quality of hospital care for all.

Sincerely,

Patricia Nolan, MD, MPH

Patricia a. Molan, MD, MPH

Director

Rhode Island Department of Health

Edward J. Quinlan

President

Hospital Association of Rhode Island

Acknowledgements

This report was prepared by Qualidigm[®] and Quality Partners of Rhode Island and was made possible, in part, with support from the Centers for Medicare & Medicaid Services.

Many organizations helped to conduct this project. Appreciation is given to those groups and individuals who assisted in the development of this report.

Community Organizations & Government Agencies

Aging 2000 International Institute of Rhode Island Rhode Island Department of Health Urban League of Rhode Island Westminster Senior Center

Health Care Organizations

Hospital Clinical Measures Workgroup Hospital Association of Rhode Island Joint Commission on the Accreditation of Healthcare Organizations

The People of Rhode Island

More than 20 Rhode Islanders took time to participate in cognitive testing for this report.

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Introduction

Background

In 1998, Rhode Island passed a law requiring the collection and reporting of information about the quality of health care in the State. This report was produced to satisfy the requirements of this law. Included in this report are graphs that provide information on how often hospitals in Rhode Island give recommended care for heart attack, heart failure and pneumonia. The information in this report was collected as part of a project with the Joint Commission on Accreditation of Healthcare Organizations. This is the second edition of the Hospital Performance in Rhode Island report. A previous report published by the Department of Health in December 2002 focused on patients discharged between May 2001 and December 2001. For this edition of the report the data used to produce the graphs of hospital performance were collected from the medical records of patients who were discharged from the hospital between January 2002 and June 2002. This report also includes comparisons to statewide hospital performance from the time period of the previous report. Hospitals in Rhode Island will continue to collect this type of information as part of their efforts to improve the quality of health care.

There is increasing national attention to performance measurement and reporting on health care quality. Three of the major organizations involved include the Centers for Medicare & Medicaid Services, the Joint Commission on the Accreditation of Healthcare Organizations and the National Quality Forum. The Centers for Medicare & Medicaid Services funded a significant portion of this project in order to further develop methods for the public reporting of hospital performance. The Rhode Island Department of Health was able to use information from these national programs to facilitate the preparation of this report.

What medical conditions are discussed in this report? Why?

The report focuses on heart attack, heart failure and pneumonia because these three conditions are common reasons why patients go to the hospital. Heart attack is the leading cause of death for Americans. Heart failure affects five million Americans, with more than half a million new cases being diagnosed each year. Pneumonia causes more than 500,000 people to be hospitalized each year. And results in about 45,000 deaths. Receiving quality care is very important for patients with these illnesses. Patients who go to hospitals with these conditions and are given quality care are more likely to recover and avoid other medical problems.

Which hospitals in Rhode Island are included in this report?

Only licensed hospitals that regularly care for patients with heart attack, heart failure and pneumonia are included in this report. A list of hospitals in Rhode Island that participated in this project is provided below.

Hospitals in Rhode Island Included in this Report

Kent County Memorial Hospital 455 Toll Gate Road Warwick, RI 02886 401.737.7000 www.kenthospital.org

Landmark Medical Center 115 Cass Avenue Woonsocket, RI 02895 401.769.4100 www.landmarkmedical.org

Memorial Hospital of Rhode Island 111 Brewster Street Pawtucket, RI 02860 401.729.2000 www.mhri.org

The Miriam Hospital 164 Summit Avenue Providence, RI 02906 401.793.2500 www.miriamhospital.org

Newport Hospital 11 Friendship Street Newport, RI 02840 401.846.6400 www.newporthospital.org Our Lady of Fatima Hospital 200 High Service Avenue N. Providence, RI 02904 401.456.3000 www.saintjosephri.com

Rhode Island Hospital 593 Eddy Street Providence, RI 02903 401.444.4000 www.rhodeislandhospital.org

Roger Williams Medical Center 825 Chalkstone Avenue Providence, RI 02908 401.456.2000 www.rwmc.org

South County Hospital 100 Kenyon Avenue Wakefield, RI 02879 401.782.8000 www.schospital.com

Westerly Hospital 25 Wells Street Westerly, RI 02891 401.596.6000

www.westerlyhospital.com

Hospital Quality

What is "quality" hospital care?

Quality care is when a hospital gives a needed medicine, treatment or test at the right time. One way to measure the quality of health care is to determine whether or not a patient got the medicines, treatments or tests recommended for his/her condition. Through research, doctors and other scientists have set guidelines for recommended care of patients with heart attack, heart failure or pneumonia. For example, research has shown that patients who are given a drug called a beta-blocker within 24 hours of having a heart attack are more likely to survive than patients who are not given a beta-blocker. Therefore, giving a patient a beta-blocker after a heart attack is considered recommended care for heart attack patients unless the patient has an allergy or some other medical condition that makes giving a beta-blocker dangerous.

There are a number of recommendations for care for each medical condition. Some patients' conditions may require a hospital to give more than one recommended treatment. For example, a patient who has had a heart attack may require another drug, in addition to a beta-blocker, after arriving at the hospital.

Examples of quality care include:

- Prescribing a medication to a patient who should get it.
- Providing an important medication or test within the recommended time period.

How was the quality of hospital care determined?

The information contained in this report was gathered from medical records at each hospital. Reviewers examined medical records to see if patients were given certain medications or tests and whether or not they were given on time. In other words, they determined if the hospital gave the recommended treatment to each patient.

What is a hospital performance rate?

The "hospital performance rate" is the percentage of time that each hospital gave the recommended treatment for patients. If a hospital gives care that follows guidelines 80 out of 100 times, it has a hospital performance rate of .80 or 80%. Higher scores indicate higher quality care.

Which hospitals participated in the project?

In addition to the 10 hospitals in Rhode Island, 73 hospitals from eight other states participated in the Joint Commission on Accreditation for Healthcare Organizations project. In total, the participants included 49 hospitals for heart attacks, 72 hospitals for heart failure and 57 hospitals for pneumonia. These hospitals were mostly from five states (Connecticut, Georgia, Michigan, Missouri and Rhode Island). These hospitals participated in the project because they were interested in being among the first hospitals in the U.S. to collect and study data on health care quality. For each condition, we have included a graph that compares the performance of each hospital in Rhode Island to the overall performance for participating hospitals.

Is this information accurate?

The information used in preparing this report is the same information used by government organizations and accrediting agencies that review the quality of hospital care. Independent review of medical records from each of the hospitals was performed by a Rhode Island Department of Health contractor to verify that information was collected accurately and consistently by each of the hospitals. As a result, the information in this report reflects the content of the medical record with a high degree of accuracy and completeness.

How should you use this information?

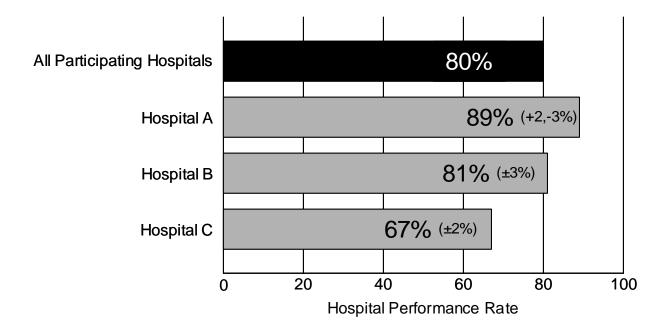
- Refer to this report when thinking about the hospitals that you or your family members use or would use.
- Discuss this information with your doctor, or other health professional, in deciding what hospital you would go to if you needed to be hospitalized.
- If you have questions about how to use this information, contact the Rhode Island Department of Health at (401) 222-2550.

How to Read the Graphs in the Report

On the opposite page is a "sample graph" that shows you how to read and understand the graphs in this report.

It is important to know how to read the graphs, in order to learn about the quality of hospital care for each of the three conditions. If you need help understanding these graphs, please contact the Rhode Island Department of Health by calling (401) 222-2550.

Sample Graph



- The performance rate for All Participating Hospitals is shown at the top of the graph, in a dark bar. The rate in this sample graph is 80%.
- Hospital A has a hospital performance rate higher than the average for all participating hospitals.
 - 89% is our best estimate for the performance rate of Hospital A.
 - +2, -3% means that we can be very confident that the rate for Hospital A is within 4% of our best estimate, in this case between 86% and 91%.
- Hospital B has a hospital performance rate about the same as the average for all participating hospitals.
 - 81% is our best estimate for the performance rate of Hospital B.
 - $-\pm 3\%$ means that we can be very confident that the rate for Hospital B is between 78% and 84%.
- Hospital C has a hospital performance rate below the average for all participating hospitals.
 - 67% is our best estimate for the performance rate of Hospital C.
 - $-\pm2\%$ means that we can be very confident that the rate for Hospital C is between 65% and 69%.

Quality of Hospital Care for Heart Attack Patients

Why is quality hospital care important for patients with a heart attack?

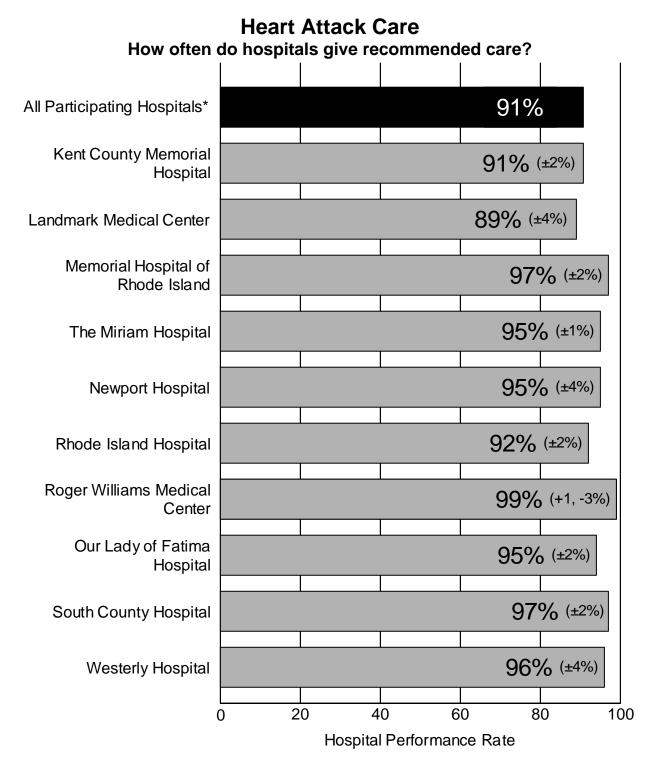
Heart disease, including heart attack, is the leading cause of death in the United States. Each year, over a million people in the United States have a heart attack. About a third, or 350,000, die from a heart attack. When a patient is given the right medical care as soon as possible after a heart attack, the chance that the patient will recover greatly increases. Getting the right medications in the days and weeks after a heart attack can also prevent another heart attack.

How was the quality of hospital care determined for patients with a heart attack?

The first step was to identify recommended treatments for heart attack patients that research shows make a big difference in whether people recover. This report examined how often patients who had a heart attack were given the following types of recommended care:

- Giving the patient a medication within 30 minutes of arrival at the hospital to dissolve a blood clot, if it is appropriate for the patient.
- Giving aspirin and a drug called a beta-blocker within 24 hours of arrival at the hospital, if they are appropriate for the patient.
- Giving a medication to reduce the workload of the heart, if the function of the heart has been impaired.
- Giving a prescription for aspirin and a drug called a beta-blocker when the patient leaves the hospital, if they are appropriate for the patient.

The next step was to examine the hospital medical records of patients who had a heart attack to see how often they got the recommended treatments. Then, based on these records, it was possible to calculate the "hospital performance rate"— the percentage of times that patients got the recommended treatments for a heart attack.



This graph shows the hospital performance rate for 10 different hospitals in Rhode Island for the period January 2002 through June 2002. The hospital performance rate is the percentage of times that the hospital gave the recommended care for patients following a heart attack. A higher number is better. If you need help understanding this graph, refer to page 7.

^{*} Forty-nine hospitals in conjunction with five state hospital associations participated in the quality measurement project for heart attack care conducted by the Joint Commission on Accreditation of Healthcare Organizations. This bar indicates the performance rate for this group for the period May 2001 through December 2001.

Quality of Hospital Care for Heart Failure Patients

Why is quality hospital care important for patients with heart failure?

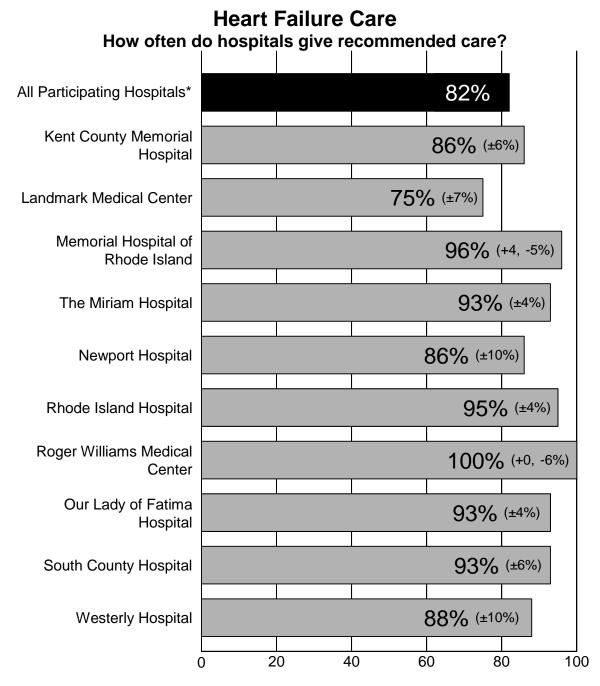
Heart failure affects nearly five million people in the United States. Approximately 500,000 to one million new cases of heart failure are diagnosed each year. Hospitalization is common for heart failure patients. Receiving proper care is important for people with heart failure to prevent the need for further hospital visits.

How was the quality of hospital care determined for patients with heart failure?

The first step was to identify recommended treatments for heart failure patients that research shows make a big difference in whether people recover. This report examined how often patients with heart failure were given the following types of recommended care:

- Doing a diagnostic test to determine if the function of the heart is impaired, if the test has not been done before.
- Giving a medication to reduce the workload of the heart, if the function of the heart has been impaired.

The next step was to examine the hospital medical records of patients who had heart failure to see how often they got the recommended treatments. Then, based on those records, it was possible to calculate the "hospital performance rate"— the percentage of times that patients were given the recommended treatments for heart failure.



This graph shows the hospital performance rate for 10 different hospitals in Rhode Island for the period January 2002 through June 2002. The hospital performance rate is the percentage of times that the hospital gave the recommended care for patients with heart failure. A higher number is better. If you need help understanding this graph, refer to page 7.

^{*} Seventy-two hospitals in conjunction with five state hospital associations participated in the quality measurement project for heart failure care conducted by the Joint Commission on Accreditation of Healthcare Organizations. This bar indicates the performance rate for this group for the period May 2001 through December 2001.

Quality of Hospital Care for Pneumonia Patients

Why is quality hospital care important for patients with pneumonia?

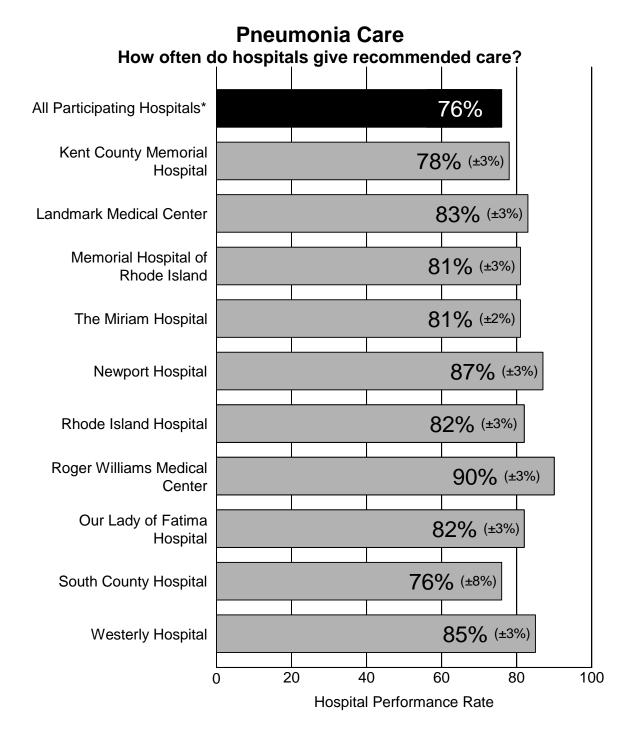
Each year, 2-3 million cases of pneumonia result in 10 million doctor visits; 500,000 hospitalizations; and 45,000 deaths. Patients receiving recommended care for pneumonia are less likely to require a return visit to the hospital. Even with the best quality care, some patients may not recover.

How was the quality of hospital care determined for patients with pneumonia?

The first step was to identify recommended treatments for pneumonia that research shows make a big difference in whether people recover. This report examined how often patients with pneumonia were given the following types of recommended care:

- Giving the patient an antibiotic within eight hours of arrival at the hospital.
- Giving the patient a diagnostic test to determine what bacteria are causing the pneumonia before giving an antibiotic.
- Doing a diagnostic test to determine if the patient is getting enough oxygen.
- Giving the patient a pneumonia vaccine if they have not been given one within five years.

The next step was to examine the hospital medical records of patients who had pneumonia to see how often they got the recommended treatments. Then, based on those records, it was possible to calculate the "hospital performance rate"— the percentage of times that patients got the recommended treatments for pneumonia.



This graph shows the hospital performance rate for 10 different hospitals in Rhode Island for the period January 2002 through June 2002. The hospital performance rate is the percentage of times that the hospital gave the recommended care for patients with pneumonia. A higher number is better. If you need help understanding this graph, refer to page 7.

^{*} Fifty-seven hospitals in conjunction with five state hospital associations participated in the quality measurement project for pneumonia care conducted by the Joint Commission on Accreditation of Healthcare Organizations for the period May 2001 through December 2001.

Changes in the Quality of Hospital Care

The previous sections of this report have focused on the quality of care for the period January 2002 through June 2002. This section of the report compares performance for this time period to performance reported in earlier time periods. The graphs on the following page indicate the hospital performance rates for the period January 2002 through June 2002 compared to the time period May 2001 through December 2001. The graphs in this section report on statewide combined performance for the 10 hospitals that participated in this project. The data for the later time period was collected prior to the publication of the first report on hospital performance in Rhode Island.

Why is it important to look at changes in the quality of hospital care?

The hospitals in Rhode Island that participate in this project are striving to improve their performance in these areas. If increases in hospital performance are seen in more recent time periods, that would be an indication that their quality improvement efforts have been successful.

Changes in the Quality of Heart Attack Care

The statewide performance rate for heart attack care increased from 93%, for the period May 2001 through December 2001, to 94%, for the period January 2002 through June 2002. This increase in hospital performance was not statistically significant at a 95% confidence level.

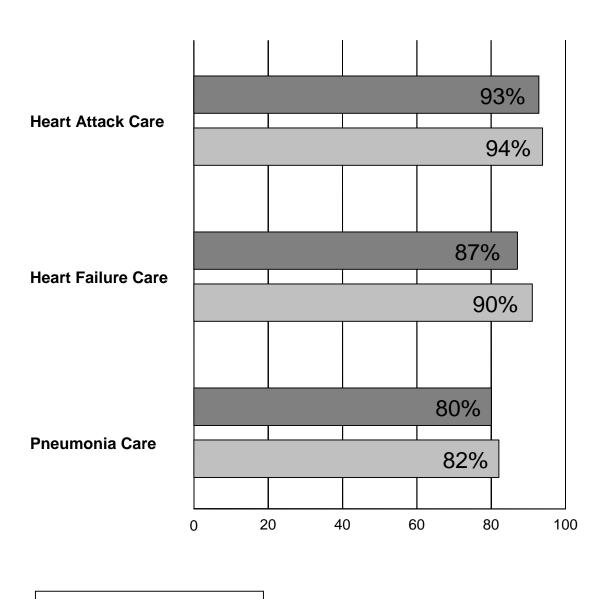
Changes in the Quality of Heart Failure Care

The statewide performance rate for heart failure care increased from 87%, for the period May 2001 through December 2001, to 90%, for the period January 2002 through June 2002. This increase in hospital performance was not statistically significant at a 95% confidence level.

Changes in the Quality of Pneumonia Care

The statewide performance rate for pneumonia care increased from 80%, for the period May 2001 through December 2001, to 82%, for the period January 2002 through June 2002. This increase in hospital performance was statistically significant at a 95% confidence level.

Changes in the Quality of Hospital Care



May 2001 – December 2001

January 2002 – June 2002

How Can I Get More Information?

For more details about the clinical performance of hospitals in Rhode Island, you can request a copy of the <u>Hospital Performance in Rhode Island: How Often Our Hospitals Provide Recommended Care for Heart Attack, Heart Failure, and Pneumonia Technical Report from the Rhode Island Department of Health by visiting their Web site, <u>www.healthri.org</u>, or by calling (401) 222-2550.</u>

For more information about the hospitals in Rhode Island, you may contact the Hospital Association of Rhode Island by visiting their Web site, www.hari.org, or by calling (401) 274-4274.

For more information about the law on public reporting for health care facilities, contact the Rhode Island Department of Health at (401) 222-2550 or view the law at www.rilin.state.ri.us/Statutes/TITLE23/23-17-17/INDEX.HTM.

For more information on the Joint Commission on Accreditation of Healthcare Organizations Pilot Project for Quality Measurement and Improvement (Core Measures), refer to their Web site at www.jcaho.org.

For more information about patient satisfaction for hospitals in Rhode Island, you may view a detailed report at the Rhode Island Department of Health's Web site, www.healthri.org/chic/performance/satisfaction.htm.